1. A method of accurately sensing the position of a moving surface having a primary movement direction, wherein said moving surface is marked with a plurality of optically detectable sensing marks, said optically detectable sensing marks having transverse lines extending transversely of said primary movement direction and angled lines extending at an angle to said primary movement direction, and wherein said optically detectable sensing marks are detected by an optical sensing marks sensor, wherein;

said sensing marks sensor comprises a linear array of a multiplicity of individual optical sensors,

said sensing marks sensor optically detects said optical sensing marks to provide positional signals from said moving surface in said primary movement direction from said transverse lines extending transversely of said primary movement direction being moved past said sensing marks sensor, and

said sensing marks sensor optically detects said optical sensing marks to provide transverse positional signals from said moving surface orthogonal to said primary movement direction from said angled lines extending at an angle to said primary movement direction by signals from respective said individual optical sensors which are actuated by a movement of said moving surface being moved past said sensing marks sensor in said primary movement direction in between a said transverse line extending transversely of said primary movement direction and a said angled line extending at an angle to said primary movement direction.

2. The method of accurately sensing the position of a moving surface of claim 1, wherein said moving surface is an imageable photoreceptor belt having said optical sensing marks extending linearly along said photoreceptor belt.

3. The method of accurately sensing the position of a moving surface of claim 1, wherein said optical sensing marks are in the general shape of a "Z."

4. The method of accurately sensing the position of a moving surface of claim 1, wherein said optical sensing marks are in a linear track and relatively closely spaced apart, and wherein said sensing marks sensor linear array of a multiplicity of individual optical sensors extends in said primary movement direction by a greater distance than said spacing between said optical sensing marks, so that more than one at a time of said optical sensing marks is moving past said sensing marks sensor linear array of a multiplicity of individual optical sensors.

5. The method of accurately sensing the position of a moving surface of claim 1, wherein said optical sensing marks are Z marks with top and bottom said transverse lines and a central said angled line, and said signals from said sensing marks sensor linear array of a multiplicity of individual optical sensors for said central said angled line are compared to said signals from said sensing marks sensor linear array of a multiplicity of individual optical sensors for both said top and bottom said transverse lines.

6. The method of accurately sensing the position of a moving surface of claim 1, wherein said optical sensing marks are Z marks, and wherein said Z marks are smaller in said primary movement direction than the length of said sensing marks sensor linear array of a multiplicity of individual optical sensors.

7. The method of accurately sensing the position of a moving surface of claim 6, wherein said Z marks comprise a top and bottom bar and an intermediate diagonal bar, and said sensing marks sensor linear array detects an intersection location relative thereto, and wherein the differential of the diagonal bar detected intersection location relative to the top and bottom bar detected intersection location of a Z mark is used to measure lateral movement of said moving surface.

8. The method of accurately sensing the position of a moving surface of claim 7, wherein when said intersection location of said intermediate diagonal bar on said registration marks sensor linear array is equidistant between said top and bottom bar intersection locations, it is assumed that said moving surface is being maintained with a desired lateral registration.

9. The method of accurately sensing the position of a moving surface of claim 7, wherein the lateral width of said Z marks is selected to correspond to the desired maximum lateral position sensing range for said moving surface.

10. In a xerographic printing apparatus having a photoreceptor belt for developing images thereon, said photoreceptor belt having optical sensing marks, and said photoreceptor belt having a primary movement direction, said xerographic printing apparatus also having a photoreceptor registration system for the registration of said photoreceptor belt relative to said images on said photoreceptor belt, said photoreceptor registration system including at least one sensing marks sensor for optically detecting the movement of said optical sensing marks of said photoreceptor belt, the improvement wherein;

said optical sensing marks of said photoreceptor belt have at least one edge extending transversely of said primary movement direction and at least one other edge extending at an angle to said primary movement direction, and

said sensing marks sensor comprises a linear array of a multiplicity of individual optical sensors which optically detect said optical sensing marks to provide positional signals in said primary movement direction from said at least one edge extending transversely of said primary movement direction and also provide positional signals orthogonal to said primary movement direction from said at least one other one edge extending at an angle to said primary movement direction by respective said individual optical sensors actuated by the movement of said surface in said primary movement direction in between said at least one edge extending transversely of said primary movement direction and said at least one other one edge extending at an angle to said primary movement direction.

11. The xerographic printing apparatus of claim 10, wherein said optical sensing marks have a "Z" configuration.